

REMARKS/ARGUMENTS

Prior to this Amendment, claims 1-19 were pending in the application. Claim 1 is amended to clarify that a repository is provided on the first node and on the second node for storing cluster configuration data by primary and secondary repository managers. Dependent claims 2, 3, and 7 are amended to provide proper antecedent basis with claim 1.

Independent claims 11, 14, and 17 are amended to clarify that the information maintained in a cooperative fashion by primary and secondary repository managers comprises "cluster configuration data." Dependent claims 13, 16, and 19 are amended to clarify where write/update information is written to maintain consistency among the primary and secondary nodes.

No new matter is added by these amendments with support found in original claims 2 and 3 and at least in paragraphs [0020] to [0030] of the specification.

Claims 1-19 remain for consideration by the Examiner.

Rejections Under 35 U.S.C. §102

The Office Action rejected claims 1-19 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,594,786 ("Connelly"). This rejection is respectfully traversed based on the following remarks.

Regarding claim 1, the Office Action states that Connelly teaches a "system for providing real-time cluster configuration data" and cites Figure 1 of Connelly. Applicants disagree with this interpretation of Connelly. As stated in the Field of the Invention, Connelly is directed to "a method and apparatus for measuring availability of ... clusters of computer systems." The Connelly Background only describes problems with measuring availability in clustered server systems not with providing real-time cluster configuration data. Further, in Figure 1, primary server 4 and backup server 6 are described in detail with reference to HA agents 20b, 20c in Figure 2 as maintaining "availability data" (see, for example, Connelly at col. 6, lines 52-65). Hence, Figure 1 teaches a system for sharing and maintaining availability data in a clustered server system NOT providing real-time cluster configuration data.

The Office Action further states that a repository manager is taught in primary and secondary nodes of a cluster with Connelly's HA agents 4 and 6 (i.e., "HA 20b" and "HA 20c") with reference to col. 6, lines 23-38. Applicants disagree. Agents 4, 6 are described in col. 6, lines 31-38 with the phrase "Each HA agent 20 monitors the

availability of the system on which it is installed..." and at col. 6, lines 55-58 with "During normal operations, each HA agent 20 maintains availability data locally." As can be seen, Connelly is addressing a different problem, i.e., how to measure and share availability data, than that addressed by the system of claim 1, and the HA agents 20 fail to teach the claimed repository managers.

Further, there is no teaching in Connelly that the primary node includes a primary repository manager "storing a first set of cluster configuration data in the primary data repository" or that the backup node includes a secondary repository manager "storing a second set of cluster configuration data in the primary data repository." The Office Action also states Connelly teaches keeping availability data consistent with the HA agents and HA server 22. Applicants disagree because Connelly does not teach storing cluster configuration data in repositories on primary and secondary nodes. Further, Connelly fails to shown having the secondary repository manager cooperate with the primary repository manager to maintain the cluster configuration data consistent.

In contrast, Connelly teaches the use of a single configuration database 64 that "tracks cluster configuration changes as they are received from the HA agents 20" (see, Connelly at col. 11, lines 16-34). The HA agents of Connelly may report changes in configuration data HAM server daemon 60 for storage in configuration database 64 as shown in Figure 5 but does not teach storing such data at each node associated with the HA agents. With reference to Figures 2 and 5, there is no discussion in Connelly of the need for two such databases, keeping such databases within a cluster, placing this cluster configuration data in consistent form on the primary and backup nodes 4, 6 of Figure 1 or managing such data with HA agents 20.

In light of the above remarks, Applicants assert that the rejection of claim 1 is not supported by Connelly and request that the Examiner withdraw the rejection. Claims 2-10 depend from claim 1 and are believed allowable as depending from an allowable base claim.

The reasons for allowing claim 1 are believed applicable to independent claims 11, 14, and 17, and Applicants request that the rejection of these claims based on Connelly be withdrawn. Additionally, as to claims 11, 14, and 17, the Office Action states that Connelly teaches a method including "choosing" a primary node and a secondary node within a cluster each having a repository manager. The

Office Action cites HAs 20b, 20c of Figure 2 and col. 6, lines 23-38, but at these citations, Connelly teaches a system having a primary node and a backup node but provides no teaching of choosing or assigning these nodes. Significantly, Connelly fails to teach maintaining consistent cluster configuration data on the chosen primary and secondary nodes. Hence, the rejections of claims 11, 14, and 17 are not supported and should be withdrawn for these additional reasons.

Claims 12, 13, 15, 16, 18, and 19 depend from claims 11, 14, and 17 and are believed allowable as depending from an allowable base claim.

Conclusions

The references made of record but not relied upon have been considered but are believed no more relevant to the pending claims than Connelly. Therefore, the pending claims are allowable over these additional references.

In view of the remarks provided in this Amendment, Applicants request that a timely Notice of Allowance be Issued in this case.

No fee is believed due for this submittal. However, any fee deficiency associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,



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